

such a way as to enable one skilled in the art to which it pertains, or to which it is most nearly connected, to make and/or use the invention. The rejection is respectfully traversed.

The Examiner asserts that with regards to the treatment described at pages 19-20 of the specification, none of the compounds have been shown to be useful in any assay. Applicants would like to point out to the Examiner, the disclosure in the specification regarding the pharmacological properties of the compounds of formula I and their salts, which can be demonstrated in assays such as the determination of integrin inhibition on page 2, lines 34-36. The level of inhibition action can be demonstrated by routine experimentation using, for example, the method described by J.W.Smith et al in the *Journal of Biological Chemistry*. 265, 12267-12271 (1990), as cited in applicants' disclosure. The connection between integrin inhibitors and their valuable use in medicaments are discussed throughout the specification. See, e.g., page 2, line 37- page 3, line 28.

In addition, at page 2, line 18-19 of the specification, two patents which disclose similar compounds of cyclic peptides are disclosed. The compounds of both DE 4310643 and EP 683 173 act as integrin inhibitors. ( EP 683 173 corresponds to DE 4415310). Both DE 4310643 and DE 4415310 were previously submitted in an IDS filed 5 September 2000, and the Examiner has confirmed review of such documents by initialing and returning the PTO-1449. Evidence of structural similarity to a compound known to have a particular therapeutic or pharmacological utility is supportive of an assertion of therapeutic utility for a new compound. See In re Jolles, 628 F.2d 1322, 206 USPQ 885.

The disclosure further describes methods for synthesizing the compounds, for preparing pharmaceutical preparations containing same, and for administering such

compounds and preparations. See, e.g., the synthesis discussion at page 10, line 7-page 18, line 21, the discussion of pharmaceutical preparations and dosages at page 18, line 22 - page 20, line 19, and the examples.

Additionally, applicants would like to point out the disclosure in the specification regarding antimicrobial activity of the claimed compounds, as well as the disclosure concerning use of the compounds as diagnostic agents and agents for studying metabolism of blood platelets. See page 4, lines 7-30 for example. Specifically, the antimicrobial action is referred to on page 4, line 7-14 of the specification and can be demonstrated by the procedure described by P. Valentin-Weigund et al., in *Infection and Immunity*, pp. 2851-2855 (1988). A discussion of use of the compounds as integrin ligands in affinity chromatography is provided at page 20, lines 20-36.

At page 3 of the of Office Action, claims 1 and 3 are rejected because of the recitation of "physiologically acceptable" and claim 6 is rejected because of its recitation of "pharmaceutical". As discussed above pharmacological activity of the compounds of the present invention can be demonstrated by the assays described in the specification using no more than routine experimentation. Furthermore, a salt can be physiologically acceptable even if it is not administered.

As for specific examples of assay testing, such examples are not required under the statute, particularly when the disclosure provides enough guidance to practice the invention without requiring undue experimentation. See, e.g., *In re Borkowski*, 164 USPQ 642 (CCPA 1970).

The mere expression of doubt is legally insufficient to support a rejection under §112, first paragraph. An application disclosure which contains a teaching of the manner

and process of making and using an invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented must be taken in compliance with the enabling requirement of the first paragraph 35 U.S.C. § 112 unless there is reason to doubt the objective truth of statements contained therein relied on for enabling support. In re Brana, 51 F.3d 1560, 34 USPQ2d 1436 (Fed. Cir. 1995). Fiers v. Revel, 984 F.2d 1164, 24 USPQ2d 1601 (Fed. Cir. 1993). No reasons have been provided as to why such statements in the specification are doubted. Consequently, withdrawal of the rejections under 35 U.S.C. 112, are respectfully requested.

**Rejection Under 35 U.S.C. 112, 2<sup>nd</sup> paragraph**


In the Office Action, claim 6 is rejected under 35 U.S.C. 112, second paragraph. Claim 6 has been amended to clarify and to correct grammar. Support for the amendments to claim 6 can be found at, for example, page 18, line 34-page 19, line 29.

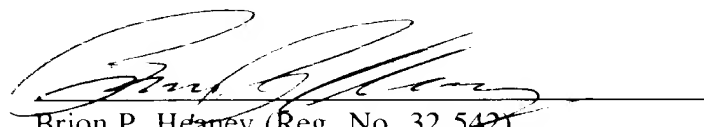
Support for new claim 20 can be found at, for example, page 1-page 2, lines 1-17.

In view of the above remarks , withdrawal of the rejection under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, is respectfully requested.

It is submitted that the claims are in condition for allowance. However, the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

Respectfully submitted,

  
Jennifer Branigan  
Patent Agent (Reg. No. 40,921)

  
Brion P. Heaney (Reg. No. 32,542)  
Millen, White, Zelano & Branigan, P.C.  
Arlington Courthouse Plaza I, Suite 1400  
2200 Clarendon Boulevard  
Arlington, VA 22201  
Tel: (703) 812-5308  
Fax: (703) 243-6410  
E-mail: heaney@mwzb.com

**Filed: January 22, 2001**

JJB:BPH(njr)\K:\PAT\Merck\2075\response 01.22.01.wpd